Discussion:

Dissecting the Aggregate Market Elasticity

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Summary

- Theoretical foundations for aggregate stock market inelasticity
- Simple frictionless baseline $\Rightarrow$ 0 price multiplier (infinite elasticity)
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  General equilibrium (GE) effect fixes equity prices
- Various frictions ⇒ inelasticity
  - risk misallocation
    heterogeneous investors, passive demand, and financial constraints
- Rich modeling and analysis, novel solution method, detailed equilibrium characterization

\- Interesting and deep paper! Highly recommend reading!

1. Motivation: volatility multiplier ⇒ inelasticity?

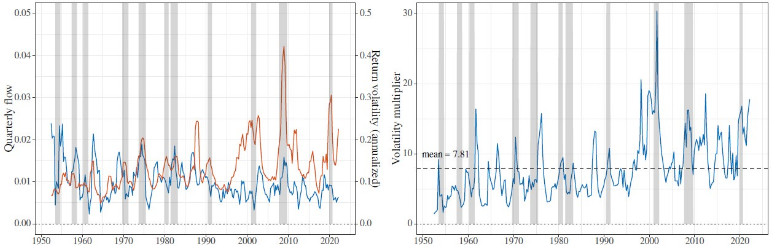

Figure 1. Quarterly flows and return volatility.
The left panel plots quarterly flows (in blue) and return volatility (in red). The right panel plots the "volatility multiplier," defined as the ratio of return volatility to flows. Source: Flow of Funds and CRSP.

Volatility multiplier: the ratio of return volatility to flows
Paper's motivation:

- Large volatility multiplier ⇒ inelastic markets
- Time-varying volatility multiplier ⇒ time-varying market elasticity

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- std (return) / std (flows) $\neq$ price_multiplier
  unless return driven mostly by flows
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  cf. "*Causation Does not Imply Variation*" (Cochrane)
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- Then, how high is the R^2 in data, i.e. to what extent we can **explain** return?

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  - how big is 1% R^2?
    (with back-of-the-envelope calculation)
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  SP500 return on equity flows regression (concurrent time-series regression)
  OOS $R^2 \approx 10\%$
  (work in progress, coming soon)

Theory

GE effect $\Rightarrow$ infinitely elastic (0 price multiplier)

- Goods market equilibrium:

$$c(\mu - p) = \frac{1}{1 + e^{p}}. \tag{3}$$

  - LHS: consumption demand: C/W
  - RHS: goods supply (tree yield): $Y/(Y + P)$
  - GE effect:
    suppose passive investors sell, downward price impact
    wealth W decreases, consumption demand decreases, equilibrium breaks
    only way to restore equilibrium:
    bond price as "relief valve" of flows, no change in p, μ, C etc.
- Comments:
  - How do we think about consumption market clearing exerting forces on equity prices?
    - Lucas tree setting: stocks are (all) real assets
    - What are the "bonds" in reality?
      Treasury? or other "relief valve" assets?

Quantitative

The purpose of the theoretical analysis

- to illustrate the mechanisms that give rise to inelasticity ?
- to quantify the importance of various frictions in giving rise to inelasticity ✓

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